

R 100

DOP 52

MW - EN 14303

**RI
SE**
Research Institutes
of Sweden**TERMOLAN**
ISOLAMENTOS TERMO-ACÚSTICOS, S.A.

Protection against fire



Thermal insulation



Acoustical insulation

DEFINITION:

Rolls of uniform thickness made of stone wool fibres bonded with synthetic binder, fixed in a wired galvanized mesh.

APPLICATIONS:

Multiple as thermal acoustical insulation industrial and maritime applications such as large pipes, flanges, vessels and boilers. They are also ideal for large curved surfaces.

BENEFITS:

- Easy and quick application;
- Easy adaptation to structural elements;
- High insulation performances;
- High mechanical performance;
- Fire safety;
- Chemically neutral and non corrosive;
- Excellent water behaviour;
- Inert product respecting the environment (CFC and HCFC free).

PRESENTATION:

Rolls. Options:

THICKNESS (mm) [NP EN 823]	DIMENSIONS (mm) [NP EN 822]
30	6000×1200
40	5000×1000
50	4000×1000
60	3500×1000
70	3000×1000
80	2500×1000
100	2300×1000

Tolerances:

THICKNESS (CLASS T2): -5 % OR -5 mm ^{a)} TO +15 % OR +15 mm ^{b)}

LENGTH: +excess / -0 mm

WIDTH: ±10 mm

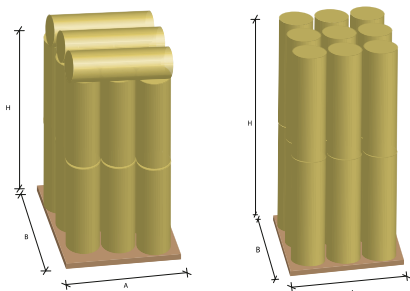
^{a)} Is valid the greatest numerical tolerance

^{b)} Is valid the lowest numerical tolerance

PACKAGING:

Rolls packed in retractile plastic.

Geometry (A×B×H):

**PHYSICAL PROPERTIES OF MATERIALS****NOMINAL DENSITY**

EN 1602
ASTM C167

100 kg/m³**MAXIMUM SERVICE TEMPERATURE**

EN 14706
ASTM C447

ST(+) = 660 °C**SPECIFIC HEAT FACTOR****c = 0.84 kJ/kg.°C****THERMAL CONDUCTIVITY, λ**

EN 12667
ASTM C335

TEMPERATURE MEDIUM (°C)	10	50	100	150	200	250	300	350	400
λ (W/m.K)	0.033	0.040	0.045	0.052	0.061	0.071	0.083	0.099	0.116
λ (kcal/h.m.K)	0.028	0.034	0.039	0.045	0.052	0.061	0.071	0.085	0.100

FIRE REACTION

EN 13501-1
ASTM E84

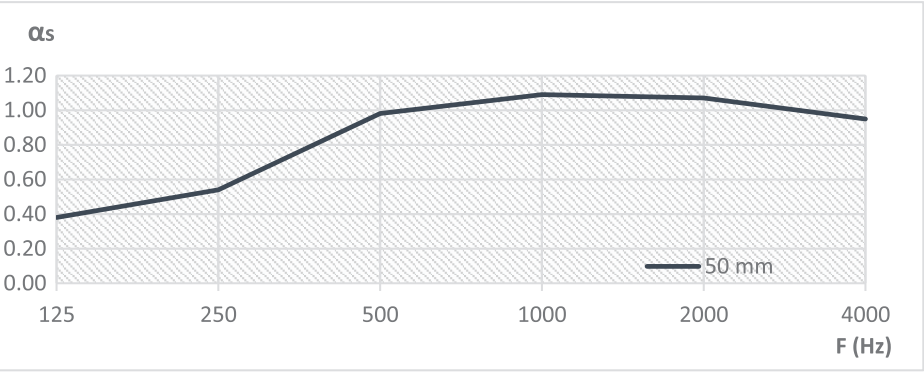
Incombustible - EUROCLASS A1

PHYSICAL PROPERTIES OF MATERIALS

ACOUSTICAL ABSORPTION COEFFICIENT, α_s

EN ISO 354

THICKNESS 50 mm	F (Hz)	125	250	500	1000	2000	4000
α_s		0.38	0.54	0.98	1.09	1.07	0.95



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

$\alpha_w = 0.90$ (MH) CLASS A

OTHER PROPERTIES

DIMENSIONAL STABILITY, $\Delta\epsilon$ [NP EN 1604]	23 °C / 90% HR: the relative deviation (length and width) does not exceed 0.0%
WATER ABSORPTION [NP EN 1609]	WS ≤ 1.00 kg/m ²
CORROSION [ASTM C795 and ASTM C692]	Non corrosive product: In an acceptable zone of Karnes Curve.
WATER VAPOUR DIFFUSION FACTOR [EN 14303]	$\mu = 1.00$
AIR FLOW RESISTIVITY [EN 29053]	AF > 60 kPa.s/m ²

